**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Please cancel claims 4-5, 9-10, 15, 23, 25, 29, 40-46, and 48-49 without prejudice.

Please amend claims 1, 6, 11, 17-19, 22, 28 and 47 as listed below.

1. (Currently amended) A method, comprising:

generating a communication signal;

transmitting the communication signal in a free-space optical communication system along an optical signal path from a first free-space optical terminal to a second free-space optical terminal, the second free-space optical terminal including a receiver to receive an optical signal;

sensing a weather condition in proximity to the optical signal path;

sending at least one engage signal to a system component to implement a tracking mode in response to the sensed weather condition; [[and]]

altering the communication signal in response to the at least one engage signal.

altering a configuration of a receiver component in response to the at least one engage signal, wherein altering the configuration of the receiver component includes modifying an optical split ratio between communication and tracking receive paths to increase a percentage of the optical signal to be directed to a tracking detector.

2. (Original) The method of claim 1, wherein the communication signal comprises a high-frequency data signal with a low-frequency tracking tone superimposed thereon, the low-frequency tracking tone having an amplitude, and wherein altering the communication signal comprises increasing the amplitude of the low-frequency tracking tone.

3. (Original) The method of claim 1, wherein altering the communication signal comprises replacing the communication signal with high-power pulses at a low-duty cycle.

Claims 4-5 (Canceled).

6. (Currently amended) The method of claim [[4]]1, wherein altering the configuration of the receiver component comprises decreasing a tracking signal bandwidth.

7. (Original) The method of claim 1, wherein sensing the weather condition comprises identifying a reduction in signal strength, at the receiver, below a pre-defined threshold.

8. (Original) The method of claim 1, wherein sensing the weather condition comprises measuring at least one physical characteristic associated with the weather condition.

Claims 9-10 (Canceled).

11. (Currently amended) A free-space optical communication system, comprising:

a first free-space optical terminal coupled to communication electronics to generate a communication signal, the first free-space optical terminal including a transmitter configured to transmit an optical signal;

a second free-space optical terminal, including a receiver to receive the optical signal, the receiver being coupled to tracking electronics to process a tracking signal, wherein the receiver includes a beam splitter, coupled to a beam controller, to split the optical signal between a communication receive path and a tracking receive path, and wherein an optical split ratio defines a percentage of the optical signal to be directed along either receive path; and

a sensor to sense a weather condition in proximity to an optical signal path, the sensor coupled to the communication electronics; and wherein

in response to a weather condition sensed in proximity to the optical signal path, the sensor is configured to send a first engage signal to the communication electronics, and the communication electronics is configured to alter the communication signal in response to the first engage signal[[.]]; and wherein

in response to a weather condition sensed in proximity to the optical signal path, the sensor is further configured to send a second engage signal to the beam controller to modify the optical split ratio to increase the percentage of the optical signal to be directed along the tracking receive path.

12. (Original) The system of claim 11, wherein the communication signal comprises a high-frequency data signal with a low-frequency tracking tone superimposed thereon, the low-frequency tracking tone having an amplitude, and wherein the communication

electronics is configured to alter the communication signal by increasing the amplitude of the low-frequency tracking tone.

13. (Original) The system of claim 12, wherein the communication electronics are further configured to alter the communication signal by disabling a high-frequency data modulation portion of the communication signal.

14. (Original) The system of claim 11, wherein the communication electronics is configured to alter the communication signal by replacing the communication signal with high-power pulses at a low-duty cycle.

Claim 15 (Canceled).

16. (Original) The system of claim 11, wherein the tracking electronics include a filter to select a tracking signal bandwidth, and wherein

in response to a weather condition sensed in proximity to the optical signal path, the sensor is further configured to send a second engage signal to the tracking electronics to decrease the tracking signal bandwidth.

17. (Currently amended) The system of claim [[15]]11, wherein the beam splitter comprises a variable wave plate.

18. (Currently amended) The system of claim [[15]]11, wherein the beam splitter comprises a graduated reflective mirror.

19. (Currently amended) The system of claim [[15]]11, wherein the beam splitter comprises a polarizing beam splitter.

20. (Original) The system of claim 11, wherein the sensor comprises a detector to receive at least a portion of the optical signal, the detector coupled to electronics configured to receive a detected signal from the detector and to compare the detected signal with a pre-defined threshold, and wherein sensing the weather condition comprises identifying a reduction in the detected signal below the pre-defined threshold.

21. (Original) The system of claim 11, wherein the sensor comprises an apparatus capable of measuring at least one physical characteristic associated with the weather condition, and wherein sensing the weather condition comprises measuring the at least one physical characteristic and identifying the weather condition therefrom.

22. (Currently amended) A free-space optical terminal, comprising:

a signal generator to generate a high-speed signal;

a tone generator to generate a low-frequency tracking tone having an amplitude, the tone generator coupled to a controller;

a first modulator circuit, coupled to the signal generator and the tone generator, to combine the high-speed signal with the low-frequency tracking tone to produce a product signal;

a second modulator circuit, coupled to the first modulator circuit, to combine the product signal with the high-speed signal to produce a communication signal; and

a transmitter to transmit the communication signal as an optical signal to a second free-space optical terminal capable of receiving the optical signal; and wherein

the controller is coupled to a sensor configured to sense a weather condition, and to generate and send an engage signal to the controller in response to the sensed weather condition, and wherein the controller is configured to increase the amplitude of the low-frequency tracking tone in response to the engage signal, wherein the controller is further configured to disable a high-frequency data modulation portion of the communication signal in response to the engage signal, wherein the sensor is further configured to generate and send a disengage signal to the controller in response to an abatement of the weather condition, and the controller is further configured to resume the high-frequency data modulation portion of the communication signal in response to the disengage signal.

Claim 23 (Canceled).

24. (Original) The free-space optical terminal of claim 22, wherein the sensor is further configured to generate and send a disengage signal to the controller in response to an abatement of the weather condition, and the controller is further configured to decrease the amplitude of the low-frequency tracking tone in response to the disengage signal.

Claim 25 (Canceled).

26. (Original) The free-space optical terminal of claim 22, wherein the sensor comprises a detector to receive at least a portion of the optical signal, the detector being coupled to electronics configured to receive a detected signal from the detector and to

compare the detected signal with a pre-defined threshold, and wherein sensing the weather condition comprises identifying a reduction in the detected signal below the pre-defined threshold.

27. (Original) The free-space optical terminal of claim 22, wherein the sensor comprises an apparatus capable of measuring at least one physical characteristic associated with the weather condition, and wherein sensing the weather condition comprises measuring the at least one physical characteristic and identifying the weather condition therefrom.

28. (Currently amended) A free-space optical terminal, comprising:

a signal generator to generate a data signal, the signal generator coupled to a controller;

a light source, coupled to the signal generator, to produce an output from the data signal;

an amplifier, coupled to the light source, to communicate the output to a transmitter to transmit the signal as an optical signal to a second free-space optical terminal configured to receive the optical signal; and wherein

the controller is coupled to a sensor configured to sense a weather condition, and to generate and send an engage signal to the controller in response to the sensed weather condition, and wherein the controller is configured to replace the data signal with high-power pulses at a low-duty cycle in response to the engage signal, wherein the sensor is further configured to generate and send a disengage signal to the controller in response to an abatement of the sensed weather condition, and the controller is further configured to replace

the high-power pulses at a low-duty cycle with the data signal in response to the disengage signal.

Claim 29 (Canceled).

30. (Original) The free-space optical terminal of claim 28, wherein the sensor comprises a detector to receive at least a portion of the optical signal, the detector being coupled to electronics configured to receive a detected signal from the detector and to compare the detected signal with a pre-defined threshold, and wherein sensing the weather condition comprises identifying a reduction in the detected signal below the pre-defined threshold.

31. (Original) The free-space optical terminal of claim 28, wherein the sensor comprises an apparatus capable of measuring at least one physical characteristic associated with the weather condition, and wherein sensing the weather condition comprises measuring the at least one physical characteristic and identifying the weather condition therefrom.

32. (Original) A free-space optical terminal, comprising:

an optical element to receive a signal transmitted through free-space, and to produce an optical signal therefrom;

a beam splitter positioned to split the optical signal between a communication receive path and a tracking receive path, wherein an optical split ratio defines a percentage of the optical signal to be directed along either receive path, the beam splitter coupled to a beam controller;

a detector to receive a data signal component of the optical signal; and

a tracking detector to receive a tracking signal component of the optical signal; and wherein

the beam controller is coupled to a sensor configured to sense a weather condition, and to generate and send an engage signal to the beam controller in response to the sensed weather condition, and wherein the beam controller is configured to modify the optical split ratio to increase the percentage of the optical signal to be directed along the tracking receive path in response to the engage signal.

33. (Original) The free-space optical terminal of claim 32, wherein the sensor is further configured to generate and send a disengage signal to the beam controller in response to an abatement of the weather condition, and the beam controller is further configured to modify the optical split ratio to decrease the percentage of the optical signal to be directed along the tracking receive path in response to the disengage signal.

34. (Original) The free-space optical terminal of claim 32, wherein the sensor comprises the tracking detector, the tracking detector coupled to electronics configured to receive a detected signal from the tracking detector and to compare the detected signal with a pre-defined threshold, and wherein sensing the weather condition comprises identifying a reduction in the detected signal below the pre-defined threshold.

35. (Original) The free-space optical terminal of claim 32, wherein the sensor comprises the detector, the detector being coupled to electronics configured to receive a detected signal from the detector and to compare the detected signal with a pre-defined

threshold, and wherein sensing the weather condition comprises identifying a reduction in the detected signal below the pre-defined threshold.

36. (Original) The free-space optical terminal of claim 32, wherein the sensor comprises an apparatus capable of measuring at least one physical characteristic associated with the weather condition, and wherein sensing the weather condition comprises measuring the at least one physical characteristic and identifying the weather condition therefrom.

37. (Original) The free-space optical terminal of claim 32, wherein the beam splitter comprises a variable wave plate.

38. (Original) The free-space optical terminal of claim 32, wherein the beam splitter comprises a graduated reflective mirror.

39. (Original) The free-space optical terminal of claim 32, wherein the beam splitter comprises a polarizing beam splitter.

Claims 40-46 (Canceled).

47. (Currently amended) A free-space optical terminal, comprising:

a signal generator to generate a high-speed signal;

a tone generator to generate a tracking tone having an amplitude, the tone generator coupled to a controller;

a first modulator circuit, coupled to the signal generator and the tone generator, to combine the high-speed signal with the tracking tone to produce a product signal;

a second modulator circuit, coupled to the first modulator circuit, to combine the product signal with the high-speed signal to produce a communication signal; and

a transmitter to transmit the communication signal as an optical signal to a second free-space optical terminal capable of receiving the optical signal; and wherein

the controller is coupled to a sensor configured to sense changes in the optical signal and to generate and send an engage signal to the controller in response to an adverse change in the optical signal, wherein the controller is configured to increase the amplitude of the tracking tone in response to the engage signal; and wherein

the controller is further configured to disable a high-frequency data modulation portion of the communication signal in response to the engage signal; and wherein

the sensor is further configured to generate and send a disengage signal to the controller in response to an abatement of the adverse change, and the controller is further configured to resume the high-frequency data modulation portion of the communication signal in response to the disengage signal.

Claims 48-49 (Canceled).

50. (Previously presented) The free-space optical terminal of claim 47 wherein the sensor is further configured to generate and send a disengage signal to the controller in response to an abatement of the adverse change, and the controller is further configured to decrease the amplitude of the tracking tone in response to the disengage signal.

51. (Previously presented) The free-space optical terminal of claim 47 wherein the sensor comprises a detector to receive at least a portion of the optical signal, the detector being coupled to electronics configured to receive a detected signal from the detector and to compare the detected signal with a pre-defined threshold, and wherein sensing the adverse change comprises identifying a reduction in the detected signal below the pre-defined threshold.